

## WHAT IS CLAIMED IS:

1. A method for transmitting data in encrypted form over a communication link from a transmitter to a receiver comprising, in combination, the steps of:
  - providing a seed value to both the transmitter and receiver,
  - generating a like sequence of pseudo-random key values based on said seed value at both said transmitter and receiver, each new key value in said sequence being produced at a time dependent upon the character of the data being transmitted over said link,
  - encrypting the data sent over said link at said transmitter in accordance with the current key value in said sequence, and
  - decrypting the data sent over said link at said receiver in accordance with the current key value in said sequence.
2. The method set forth in claim 1 wherein the data transmitted over said link is divided into fixed length blocks and wherein a new key value is produced each time a predetermined number of said blocks is transmitted over said link.
3. The method as set forth in claim 2 further including the step of generating a second pseudo random sequence of values to alter said predetermined number of blocks each time said key value changes.
4. The method as set forth in claims 1, 2 or 3 including the steps of:
  - compressing the data to be transmitted into a compressed format at the transmitter prior to said encrypting step, and
  - decompressing the data recieved at said receiver after said decrypting step.
5. The method as set forth in claim 1 including the further step of transmitting like random number seed values to both said transmitter and said reciever from a control center to enable said transmitter and reciever to communicate encrypted information utilizing said transmitted seed values.